

solution of the index problem. The literature relating to American botany has now been indexed since 1894 on the card system; by purchasing duplicate cards each library can adopt the subject catalogue suited to its own needs which are sure to vary according to the size, purpose, and character of the library. Under the card system, however long the index is continued, there will be simply one place to search for any paper by any author; the example of Just's Jahresbericht, hitherto our most valuable index for the world's literature, has demonstrated the practical inutility of the annual volume as an index guide. Life is too short to be forced to waste time consulting annual volumes when there is an infinitely simpler way.

LUCIEN M. UNDERWOOD.

## PROCEEDINGS OF THE CLUB

TUESDAY, OCTOBER 14, 1902

The meeting was held at the College of Pharmacy; 13 present; Dr. Britton in the chair.

The scientific program consisted of informal reports of summer work and observations.

The secretary spoke of his collections of asters, also of *Euphrasia* and other alpine plants in the White Mountains. Discussion regarding Wettstein's monograph of *Euphrasia* followed.

Professor Lloyd reported various observations made during the summer, which are being published in the current numbers of *TORREYA*.

Dr. Tracy E. Hazen reported observations about St. Johnsbury, Vt., on the black maple, *Acer nigrum*. He maintained its specific distinctness from the sugar maple. Dr. Britton confirmed its distinctness as seen in other parts of western New England and in western New York. Its leaves are darker beneath and are said to expand about two weeks later in spring, its fruit is much larger and there seems to be a difference in the angle of divergence of the keys.

Miss F. A. Mulford spoke of the flora of the Hempstead plains, on Long Island, remarking on certain similarities to that of Kansas.

Miss Mary E. S. Davidson reported observations when at Wood's Hole this summer, upon an interesting green fungus, new to that region, a *Lactarius*.

Miss Catharine Murray spoke of her visit to the botanical gardens at Kew, Brussels, Paris, etc.

Mr. Eugene Smith, Miss L. K. Lawall, and others, spoke of a number of localities for the fringed gentian near New York, and of an increased attendance upon the summer excursions.

Dr. MacDougal remarked upon the dissimilarity of the alpine conditions of the Rockies from those of the White Mountains. Tracts which in July in the rains of the White Mountains are covered merely with green would have been blazing with flowers if in the Rockies.

Dr. Underwood spoke of the recognition among farmers about Redding, Ct., of two types of the sweet flag, *Acorus Calamus* L., that with a white root being in favor, that with a red root being smaller and somewhat bitter, and with young leaves of a different tone of color.

Dr. Underwood also mentioned his finding young plants of the date-palm coming up in railway rubble at South Norwalk, Ct.; similarly observed on garbage-heaps about New York by Mr. Eugene Smith. He spoke also of the successful cultivation on a lawn at Danbury, Ct., of our native orchid *Cypripedium reginae* Walt., where in four years a cluster of three or four plants has increased to forty.

Dr. Underwood also referred to the Torrey Club's Fourth of July excursion, when the Botanical Club of Syracuse provided generous entertainment. The saline plants about Onondaga Lake are disappearing and the refuse from the soda-ash process is gradually filling up the lake. Where such plants as *Salicornia* once occurred by the acre, there are now but few plants remaining.

He referred also to his finding that *Botrychium neglectum* and *B. lanceolatum* still survive in the original locality where he first found these small species some twenty-five years ago.

Mrs. Britton reported upon observations on an interesting *Vit-taria* brought by Dr. Evans from Porto Rico; and upon forms of *Stachys* found by her on Hempstead Plains in Long Island.

In a white cedar swamp there she observed the newly recognized fern *Dryopteris simulata* growing in great masses and abundantly distinct.

Mrs. Britton spoke also of certain instances of new habit assumed by mosses on adopting a new habitat as in a *Leptodon* usually on trees, latterly found in tufts on dry rocks; and in case of *Porotrichum Alleghaniense*, at Green Lake, Jamesville, New York, an aquatic form surviving the desiccation of the rock surfaces, and now assuming the habit of a *Climacium*.

Dr. Britton, whose summer was largely given to administrative work, secured time for attendance upon the Association meetings at Pittsburg, and for prosecution of his studies on the Cyperaceae and the Crassulaceae at Kew. Nearly half of the known species of North American Crassulaceae are now growing in Washington or at the New York Botanical Garden, a necessary preliminary to proper descriptive work with these plants. The fleshy foliage and calyx require description from the life, not, as often hitherto, from herbarium specimens. Many of the numerous Mexican Crassulaceae are very local, and known only from one or two localities.

Discussion followed upon the effects of the prolonged wet weather of the present season, Dr. Hazen remarking upon sedges in Vermont which are usually stiff but this year were very long and decumbent.

EDWARD S. BURGESS,

*Secretary.*

WEDNESDAY, OCTOBER 29, 1902

The meeting was held at the Botanical Garden at 3:30 P. M.; 20 persons present; Dr. MacDougal in the chair.

Professor D. S. Johnson, of the Johns Hopkins University, was elected to active membership.

Two resignations were accepted: Mrs. Francis S. Parsons, Aibany, and Miss Mary T. Pitman, Providence.

The scientific program followed: The first paper presented was by Miss F. A. Mulford, "Remarks on *Gerardia decemloba*, Greene, with exhibition of specimens." The plant was found at Hempstead, Long Island, September 5, 1902. This is the second station for the species; it was first found by Professor

Greene at Washington, D. C., in 1898. Dr. Britton followed with remarks upon the peculiar physiography of the Hempstead plain, its isolation, and the lack of trees, which is perhaps due to fires.

The second paper was by Miss Anna Murray Vail on "Some rare Books recently added to the Library of the New York Botanical Garden." This will shortly appear in the *Journal of the New York Botanical Garden*. Among some 400 works of the older botany recently procured, and now exhibited to the Club, the oldest is a fifteenth century MS. of Macer Floridus *De virtutibus herbarum*, in Gothic letters. The oldest printed volume is one of the *Ortus Sanitatis*, from the end of the fifteenth century; the next, the Venice edition of 1509 of the *Aggregator practicus*, one of the herbals often known simply as *Herbarius*. Later notable works secured, include many of those of Mattioli, Dodoens, and Lobel; the rare first volumes issued by Dodoens (his *De frugum Historia*, 1552) and by Clusius (1557); also a copy of Clusius' greatest work, his *Rariorum* of 1601, of special interest because a presentation copy from Clusius himself. Rarities include a Passaeus of 1614, and the elephant folio of the *Hortus Eystettensis* of 1613, in unusually fine preservation. There is a fine copy of Rivinus of 1690; and one of Linnaeus' rarest works, his autobiographical pamphlet of 1741, "*Orbis eruditi iudicium*," believed to exist in only four copies.

The third paper was by Dr. Rydberg, a "Review of a recent Monograph of *Campanula rotundifolia* and its Allies." In the discussion of the paper Dr. MacDougal called attention to the work of Goebel on this plant, saying that Goebel had been able to produce rounded leaves on *Campanula*, by experiment, and in any part other than the inflorescence, but that it had not been possible to prevent the formation of the rounded basal leaves.

The final paper was given by Dr. Arthur Hollick on "Buried swamp Deposits of Maryland." Along the shores of the Chesapeake Bay swamp deposits of the Pleistocene era are being uncovered by water action. These occur under from five to thirty feet of gravels. Among the vegetable remains discovered, there were described and shown stumps of the bald cypress, cones of

two species of *Pinus* (*P. echinata* and *P. Strobus*), and beech and hickory nuts. Many seeds are now being determined by experts of the Department of Agriculture. When the determination of the seeds is completed a good account of the ancient flora of that region can be given. A comparison of the living with the fossil plants of the locality shows that, except for the cypress, the plants now growing seem the same as those there in Pleistocene time.

In discussing the conditions attendant on the formation of the ancient flora and its disappearance, Dr. Hollick stated that the land had undergone elevation twice and subsidence twice. The first elevation preceded the formation of the flora, which was to be found mainly in the valleys. The area was then depressed and completely submerged, and at length was covered by sand brought in by the waves. After the first elevation and during the first subsidence deposits were formed either *in situ*, as swamps, or at the mouths of the valleys by transported material. These after the second elevation are now being exposed by erosion. The second subsidence is now taking place, and a second series of vegetable deposits is being laid down. The rate of this subsidence has been calculated to be about two feet in the century.

EDWARD S. BURGESS,

*Secretary.*

#### NEWS ITEMS

Mr. Homer D. House, Syracuse University, 1902, has entered Columbia University as a graduate student in botany.

Professor A. D. Selby, botanist of the Ohio Agricultural Experiment Station, is carrying on some special lines of research at the New York Botanical Garden.

The editor of *Torreya* spent the greater part of the months of October and November in Florida, studying and collecting the marine algae of that region.

A suggestive nature study leaflet entitled "Plant-Travellers" has recently been issued by Professor Clarence Moores Weed, of the New Hampshire Agricultural Experiment Station.

The large collection of West Indian and South American ferns accumulated by the late George S. Jenman, of Georgetown, British Guiana, has been purchased by the New York Botanical Garden.